



2024-2027

Multi-Year Budget

City of London

2024 to 2027 Business Plan

Service: Wastewater and Treatment

\$2.09

Cost per day for the
average rate payer
(2024 to 2027)

Who we are:

- The City operates, sustains, expands and improves the wastewater and stormwater infrastructure to efficiently provide reliable and environmentally sound wastewater and drainage collection and conveyance services to customers for all residential, industrial, commercial and institutional needs, while also providing education and encouraging a shared watershed-based management approach.
- This service is responsible for the planning, engineering and design functions for all sanitary and stormwater infrastructure, the operation and maintenance of the City's stormwater and sanitary sewer collection networks and the operation and maintenance of the City's wastewater treatment plants and pumping stations.

What we do:

- The concept of One Water involves the management of water from all sources supportively to meet economic, social and environmental needs. That means protect all water first, conserve it secondly and lastly treat it. Water is valued as a resource to be recovered.

Why we do it:

- **Mandatory** - The provision of effective wastewater and stormwater management is critical to ensuring the public health and safety of residents and protection of the natural environment. All major urban Ontario municipalities have established stormwater and wastewater systems in accordance with the Province's Environmental Compliance Approval process. Municipalities are required to meet the requirements of their specific Environmental Compliance Approvals and meet all other requirements outlined in legislation including the Ontario Water Resources Act, the Municipal Drainage Act and Clean Water Act and their associated regulations.

The following table provides an overview of the budget for this service:

Budget Summary (\$000's)	2024	2025	2026	2027	2024 to 2027 TOTAL
Gross Operating Expenditures	\$129,669	\$137,462	\$145,692	\$153,340	\$566,164
Other Revenues	-\$129,669	-\$137,462	-\$145,692	-\$153,340	-\$566,164
Total Capital Expenditures	\$176,206	\$172,619	\$154,340	\$137,670	\$640,835
Full-Time Equivalentents (FTE's)	208.7	212.3	214.4	214.5	N/A

Reflects 2024 to 2027 approved City budget as of March 1, 2024.

Note: Budget adjustments related to 2024 to 2027 Multi-Year Budget business cases are reflected in the annual budgets presented in the table above, however, there was no rate impact in year 2024. The rate impact of the 2024 business cases will be addressed in 2025 rate increases. The 2024 budgeted figures in the draft 2024 to 2027 budget document did not reflect the 2024 budget adjustments from the business cases.

Linkage to the 2023 to 2027 Strategic Plan

This service supports the following Strategic Areas of Focus in the 2023 to 2027 Strategic Plan:



**Reconciliation, Equity,
Accessibility, and
Inclusion**



**Economic Growth, Culture,
and Prosperity**



**Housing and
Homelessness**



**Mobility and
Transportation**



Wellbeing and Safety



**Climate Action and
Sustainable Growth**



**Safe London for Women,
Girls, and Gender-Diverse
and Trans People**



Well-Run City

Environmental, Socio-economic Equity and Governance (ESG) Considerations

Environmental, Socio-economic Equity and Governance Profile for this service:



Environmental:

- A well-managed sewage system is critical to supporting the health and well-being of our community while protecting our waterways. The removal of pollutants prior to discharge to the Thames River helps protect the natural environment as well as sources of drinking water. Ensuring the City has sufficient wastewater treatment capacity and conveyance, and mitigating combined sewer overflows to our waterways, is foundational in our work.
- The changing climate has meant an increase in the magnitude and frequency of extreme weather events that can result in flooding. Resilience to climate change is considered in every project and drives other work including flood protection and erosion control works.

Socio-economic Equity:

- The City ensures equitable access to wastewater collection and treatment to ensure the health and safety of everyone in our community. Ensuring sufficient capacity in the wastewater system contributes to the City's efforts to construct more housing across the affordability spectrum. Supporting intensification through system upgrades provides cost efficient servicing options for the creation of housing units.

Governance:

- In Ontario, the drinking water sector is highly regulated to ensure the safety of the public and the protection of the environment. As such, sanitary and stormwater collection and treatment systems must comply with the requirements of all applicable legislation and regulations including the Clean Water Act, the Ontario Water Resources Act, and the Ubuntu.

The following section provides an overview of the key activities the service plans to undertake from 2024 to 2027 to implement the Corporation's 2023 to 2027 Strategic Plan, as well as an overview of the risks and challenges the service is anticipated to experience during this period:

Service Highlights 2024 to 2027

- Pollution Prevention and Control Plan - The Pollution Prevention and Control Plan is London's long-term strategy to identify, investigate and reduce sewer system overflows. This plan will identify a prioritized 5-year action plan to achieve long-term solutions that limit the volume and frequency of untreated wastewater discharges to the Thames River and receiving streams.
- The Greenway Incinerator is an essential system responsible for safe and efficient disposal of the solids removed at the City's wastewater treatment plants. It is being re-built in 2024 to ensure reliable performance over the remainder of its expected life (up to 10 years). This is a significant project but represents the last time that renewal is an option for the City's wastewater solids disposal.
- Biosolids Management Master Plan – This public consultation explored the alternative means of disposing of the waste solids generated at the City's five wastewater treatment plants. The study identified opportunities for circular economy solutions like creating nutrients for soil amendment as well as the generation of renewable natural gas or electricity. These solutions would be significant contributors to the City's goal to be a net-zero community by 2050. This study will be finalized in 2024.
- Wastewater Treatment Plant Flood Protection - The Adelaide and Greenway Plants are vulnerable to flooding given their proximity to the river and the higher river levels associated with climate change. Berms and effluent pumping are in design, with construction expected to start in spring 2024. These projects will ensure that these critical facilities remain operational during high river events. This project is supported by funding from the Disaster Mitigation and Adaptation Fund.
- Canada-Ontario Lake Erie Action Plan - The Great Lakes Water Quality Agreement requires the United States and Canada to reduce phosphorus levels that contribute to algal blooms in Lake Erie by 40% based on levels measured in 2008. The Thames River Watershed has been identified as a priority watershed. The final Canada-Ontario Lake Erie Action Plan was issued by the Federal government in February 2018. The plan includes a series of specific actions to be undertaken by the City of London that were endorsed by Council in Q4-2017.
- Pottersburg-Vauxhall Servicing Improvements – Long-term plans generated in the East London Sanitary Servicing Strategy recommended integrating the operation of the Vauxhall and Pottersburg wastewater treatment plants to better leverage available capacity with the goals of reducing overflow and bypass activity while also responsibly servicing growth in East London. Upgrades at Vauxhall are ongoing, while a transfer pumping station to move flows from Pottersburg is planned for 2025.

- Greenway Wastewater Treatment Plant Section 1 Restoration – The loss of treatment capacity in Section 1 at Greenway in 2021 has created a significant servicing gap that impacts key areas of growth including the downtown. An engineering assignment will be awarded to complete the design of the replacement treatment processes. This will position the City to take advantage of funding opportunities for the construction of the work, should they become available prior to the next budget cycle. Otherwise, construction will be post this Multi-Year Budget cycle.
- Combined Sewer Separation – The Combined Sewer Separation Program will continue over the Multi-Year Budget period. This program not only replaces the oldest sewers in London but also supports intensification in the core and along rapid transit corridors, and fulfills commitments made in the Canada-Ontario Lake Erie Action Plan and the Pollution and Prevention Control Plan.
- Trunk Sanitary Sewer Capacity to Support Downtown Intensification – The replacement of the Labatt Sanitary Siphon and the Cavendish Trunk Sanitary Sewer will renew critical aging infrastructure and provide increased sanitary servicing capacity. This additional capacity directly supports intensification in the downtown while continuing to protect water quality in the Thames River by ensuring development does not result in increased combined sewer overflows during wet weather events.
- Pottersburg Sanitary Trunk Sewer - The 1955 Pottersburg Sanitary Trunk Sewer runs from Clarke Road in the east to First Street in the west. This trunk sewer crosses Pottersburg Creek nine times over that distance and is in poor condition. During the Multi-Year Budget period, Sewer Engineering will continue the multi-phased replacement and realignment of this sewer which began with Phase I construction in 2022.
- Rapid Transit Coordination – Over the Multi-Year Budget period, the infrastructure renewal program will continue to be coordinated with the Rapid Transit program to support the renewal of infrastructure nearing or at the end of life along Rapid Transit corridor.
- Stormwater Pond Maintenance – The Sewer Operations Division continue to develop and implement more effective stormwater management facility maintenance and rehabilitation programs to improve the quality of water discharging into natural water courses including the Thames River.
- Excess Soil Handling Facility – This new project involves a feasibility study and funding to construct a new excess soil handling facility for Sewer Operations and Water Operations to adhere to Provincial regulatory requirements.
- Dingman Creek Environmental Assessment – Over the Multi-Year Budget period, a comprehensive Stormwater Servicing Strategy within Phase 2 of the Dingman Creek Subwatershed will be finalized to support growth in South London within the Urban Growth Boundary, optimize flood control, and create a “Complete Corridor” to support the movement of water, wildlife and people.
- GMIS Stormwater Servicing Construction – The Stormwater Engineering Division will continue to lead the design and construction of stormwater management facilities to support growth City-wide in accordance with the Growth Management Implementation Strategy (GMIS) and the Development Charges By-law.

- Low Impact Development (LID) – LID designs are being incorporated as part of Lifecycle, Growth, and Service Improvement projects City-wide in order to promote infiltration at the source and reduce run-off volumes where beneficial and practical.
- Waterway Restoration - The Waterways Restoration Annual Program will continue as part of the Multi-Year Budget. The Program includes remediation work on open channels within the Built Area using natural channel techniques to improve the natural environment and protect properties from flooding.
- Flood Control Solutions (Climate Change Adaptation) – The Multi-Year Budget provides further funding to support improvements to dykes and dams, including the City’s share to leverage federal funding received to initiate reconstruction of Broughdale Dyke. Stormwater Engineering will continue to support Upper Thames River Conservation Authority (UTRCA) in the design and construction of upcoming phases of the West London Dyke.
- Thames River Erosion Control Structures – A business case was approved as part of the 2024 to 2027 Multi-Year Budget to reconstruct aging erosion controls, such as gabion baskets and concrete revetments along the Thames River, and replace them with natural bank stabilization techniques, all to protect City lands from bank failure or shoreline washout. The first priority project in this program is Harris Park, scheduled for summer 2024 construction in coordination with City festivals.
- Culvert Replacement Program – In 2021, a culvert inventory and assessment report was prepared to review for critical water crossings throughout the City as part of Corporate Asset Management planning. A business case was approved as part of the 2024 to 2027 Multi-Year Budget for Stormwater Engineering to partner with Transportation Planning and design to initiate lifecycle replacement of culverts in poor and aging condition, all to prevent flooding and road collapse.
- Support the establishment of internal locate services in order to optimize efficiency and effectiveness of this legislated service.

Risks and Challenges Anticipated in 2024 to 2027

- The expected wave of retirements in management and operations positions has begun, and recent recruitments have demonstrated a difficulty in attracting qualified personnel. Recruitment efforts are increasing, but there remains a risk that the coming years will feature less-experienced staff leading and operating City facilities. Strategies for accelerating the training of junior staff have been implemented to help mitigate the impact. Through training and mentoring, junior staff will continue to be provided the opportunities to gain the knowledge, skills, and abilities to fill senior operator roles and advance to supervisory opportunities.
- The Provincial government’s mandate for housing creation will create capacity issues at the City’s wastewater pumping stations and treatment plants that were previously projected to occur 10 to 20 years in the future. Depending on where this tremendous growth is planned to occur, upgrades at City facilities may need to be accelerated with the associated budget advancement and staff reallocation.

- The increasing frequency of significant weather events associated with Climate Change places strain on existing City resources and have the potential for significant economic and social impacts from surface and basement flooding.
- The City plays a major role in responding to environmental spills in the community. Sewer Operations staff respond to these spills to meet Ministry of Environment, Conservation and Parks (MECP) expectations. The number and severity of spills are unpredictable and the cost to mitigating these spills poses a financial risk.
- Updates to the Floodplain Hazard limits are underway within Dingman Creek, Mud Creek and the Thames River. The updated 250-year elevations may increase the floodplain in several areas throughout the City, resulting in significant impacts on public and private property.
- Unforeseen and ongoing changes in legislation or regulations can have a significant financial impact on the capital and operational work of the Wastewater area.
- Industrial sources of wastewater have become more intense, causing disruptions to the treatment processes at City facilities. Revisions to the City's wastewater discharge by-laws will be proposed to provide Civic Administration with the tools necessary to recover costs and continue to meet regulatory obligations.
- The Multi-Year Budget provides funding to support UTRCA-led initiatives including improvements to dykes and dams as well as City-led watercourse improvements. There is an inherent short-term flooding and environmental risk during construction while undertaking projects adjacent to a flood prone river.

Other reference information and links:

- Link to the City of London website page: [Sewers and wastewater | City of London](#)
- Link to the City of London website page: [Stormwater | City of London](#)
- Link to the City of London website page: [Dingman Creek Environmental Assessment | City of London](#)
- Link to the City of London website page: [Pottersburg Sanitary Trunk Sewer Environmental Assessment | City of London](#)
- Link to the City of London website page: [Infrastructure Renewal Projects](#)

Contact:

- Ashley Rammeloo, MMSc., P.Eng., Director, Water, Wastewater, and Stormwater
- 519-661-CITY (2489) Extension 4993
- arammeloo@london.ca